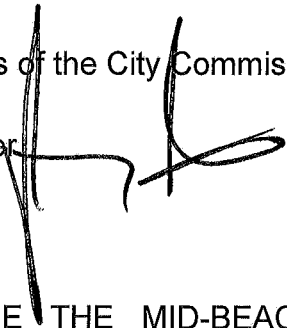


MIAMI BEACH

COMMISSION MEMORANDUM

TO: Honorable Mayor and Members of the City Commission

FROM: Jimmy L. Morales, City Manager 

DATE: October 16, 2019

SUBJECT: DISCUSSION TO CONTINUE THE MID-BEACH FREEBEE ON-DEMAND TRANSIT SERVICE

RECOMMENDATION

This item is being presented to the City Commission as a status update of the Freebee pilot. The Administration recommends that the Mayor and City Commission extend the pilot program for two additional months from November 1 until December 31, 2019. The extension will allow staff more time to collect data on performance metrics, including during high impact season, and to have a better understanding of the impact of the additional vehicles on the service.

BACKGROUND

Based on the 2019 Resident Survey, 63% of residents use their automobile as a primary mode of transportation for trips within Miami Beach. While many residents use the City's trolley service and 75% of residents surveyed are satisfied with the service, there is a need to provide first mile/last mile connectivity particularly in areas that are not served by the trolley service.

On May 17, 2017, the City Commission discussed on-demand transportation service to low-demand areas as a first mile/last mile solution. As a result of the discussion, the City Commission directed the Administration to pursue the service at no cost to the City.

In response to City Commission direction, Request for Letters of Interest (RFLOI) for On-Demand Transit Service was issued in February 2018, and responses were received from three firms on March 2, 2018. The goal was to explore partnership with a vendor that would, at no cost to the City, provide "first mile/last mile" on-demand transportation service to areas underserved by Miami-Dade County bus service and not served by City's trolley service. None of the firms could provide the service at no charge to passengers or without a City subsidy as required by the RFLOI; thus, all three firms were deemed non-responsive.

In early 2019, the City's Transportation Department identified funding for a four month on-demand transit service pilot program during the last fiscal year. Following a competitive solicitation, the pilot program operated by Freebee was launched on May 31, 2019, serving portions of Middle Beach. The pilot program service provides first mile/last mile service connecting to the City's trolley and County's bus service within the geo-fenced service area and door-to-door service for trips originating and ending within the geo-fenced service area (attachment A). The service operates as an eco-friendly vanpool, dynamically adjusting vehicle routing to appropriately meet ridership demand and service needs within the service area. The service operates from 6:30 am to 10:00 pm Monday to Saturday and from 8:30 am to 10:00 pm on Sundays.

At its September 11, 2019 meeting, the City Commission discussed continuing the Freebee pilot program and adopted the following motions: 1) referred the item for further discussion to the September 20, 2019 Finance and Citywide Projects Committee (FCWPC); 2) directed the Administration to extend the pilot program through October 31, 2019; 3) approved the addition of two more vehicles to the service for the remaining term of the pilot program; and 4) approved the use of advertisement on the vehicles to offset some of the operating cost to the City through the end of the pilot program.

UPDATE SINCE THE SEPTEMBER 11, 2019 CITY COMMISSION MEETING

At its September 20, 2019 meeting, the FCWPC discussed this item and approved use of advertisement on the vehicles to offset some of the operating cost to the City through the end of the pilot program. Prior to installation of any ads, Freebee is required to submit the advertisement content to the City for review and approval. Staff and Freebee have agreed to share advertising revenue equally.

Due to delays with hiring and training personnel, Freebee placed the two additional vehicles in service on October 2, 2019. Since that date, staff has observed an increase in ridership and decrease in wait times. The Administration will present up-to-date figures at the October 16th City Commission meeting. Unfortunately, two weeks of data is not enough to reach credible conclusions. An extension of the pilot through year end would enable us to create a more accurate database.

ANALYSIS

Pilot Program Metrics

The table below depicts performance metrics for the ongoing pilot program from its commencement on May 31 to October 1 with only one vehicle in service. As the pilot program progresses, staff will provide up-to-date figures using the table below.

	May 31, 2019 – October 1, 2019	October 2, 2019 – October 31, 2019	November 1, 2019 – December 31, 2019 ¹
Number of vehicles in service	1	3	3
Monthly operating cost (without advertising)	\$12,618	\$36,525	\$36,525
Monthly advertising revenue to City	N/A	\$2,500 ²	\$6,000 - \$9,000 ³
Monthly net operating cost to City	\$12,618	\$34,025 ⁴	\$27,525 - \$30,525 ³
Total net operating cost to City	\$49,757	\$34,025 ⁴	\$55,050 - \$61,050 ³
Average daily ridership	50	TBD	TBD
Average cost per passenger	\$8.12	TBD	TBD
Average wait time	14.3 minutes	TBD	TBD
Average vehicle occupancy	1.6 passengers/trip	TBD	TBD
Vehicle utilization⁵	70%	TBD	TBD
Service satisfaction⁶	96%	TBD	TBD

¹ Pending City Commission approval

² As of October 10, 2019, Freebee has sold advertising on one vehicle only

³ Assuming Freebee sells advertising on all three vehicles

⁴ Anticipated cost to the City assuming Freebee advertising on one vehicle only

⁵ Measured as percentage of time vehicle spends serving all trips over the total service hours

⁶ Based on feedback forms received from riders

Based on the on-board passenger survey:

- If on-demand transit service was not provided, 41% of the passengers would conduct this trip by personal vehicle
- 53% of the passengers used it for leisure/recreation, 27% for commuting to work, 8% for school, 6% for religious, and 5% for healthcare

GHG emissions reduction during the pilot period (5/31/19 – 10/1/2019) of 1.06 MT CO₂e is equivalent to:

- the GHG emissions avoided by switching 40 incandescent lamps to LEDs
- the carbon absorbed by 1.2 acres of U.S. forests in one year
- the CO₂ emissions produced from charging 135,163 smartphones

The average cost per passenger of \$8.12 is comparable with Town of Miami Lakes (\$9.20/passenger) and Village of Pinecrest (\$8.80/passenger) where Freebee provides similar service, and, per Freebee staff, service area and number of vehicles are comparable to our pilot program. These figures do not account for advertising revenue. Both cities use advertising revenue to offset their costs. Miami Lakes receives approximately \$2,500 monthly in advertisement revenue from two vehicles, compared to our anticipated monthly revenue of \$6,000-\$9,000 for three vehicles.

While average service cost per passenger is significantly lower for trolley service at approximately \$2.20, on-demand service provides a more cost-effective way of providing public transit service to low-demand residential areas such as Middle Beach which consists mostly of single-family homes and has little to no fixed transit service. For example, expanding the city's trolley service to this area would be cost-prohibitive as it would result in a much higher operating cost to the City and cost per passenger (as compared to the current on-demand service).

Additional metrics including passenger age groups, detailed breakdown of ridership per day, number of requests and number of rides provided, heat maps of pick-up and drop-off locations as well as survey results are included in attachment B.

FINANCIAL IMPACT

The cost for the additional two months of Freebee service (from November 1 to December 31, 2019) can range from \$55,050 to \$73,050 depending on advertisement sales. Funding for this service is not included in Transportation and Mobility Department's FY 2019/20 operating budget. However, the cost can be covered by anticipated trolley savings.

CONCLUSION

The on-demand transit pilot program has been very well accepted by the Mid-Beach community with 96% satisfaction based on passenger surveys. More importantly, the service has provided Mid-Beach residents an eco-friendly mobility option that does not produce tailpipe emissions, and it has helped connect residents in this underserved/low-demand area of the City to existing trolley and bus services. The Administration recommends continuing the pilot through year end in order to make a more informed decision on this type of service.

Applicable Area

Middle Beach

Is this a Resident Right to Know item?

No

Does this item utilize G.O. Bond Funds?

No

Strategic Connection

Mobility - Increase multi-modal mobility citywide and connectivity regionally.

Legislative Tracking
Transportation and Mobility

ATTACHMENTS:

Description

- ▣ Attachment A - Service Area Map
- ▣ Attachment B - Performance Metrics Report

On-Demand Service Areas and Systemwide Trolley Service Map

Legend

-  On-Demand Service Areas
-  North Beach Loop
-  Collins Express
-  Middle Beach Loop
-  South Beach Trolley

**Publix on
Collins Ave/69 Street**

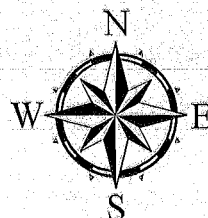
**Shane Center
Indian Creek Dr/65 Street**

**Publix on
20 Street/West Ave**

**Transit hub on
Alton Rd/Lincoln Rd**

**Transit hub on
Washington Ave/17 Street**

0 0.4 0.8 1.6
Miles
Key

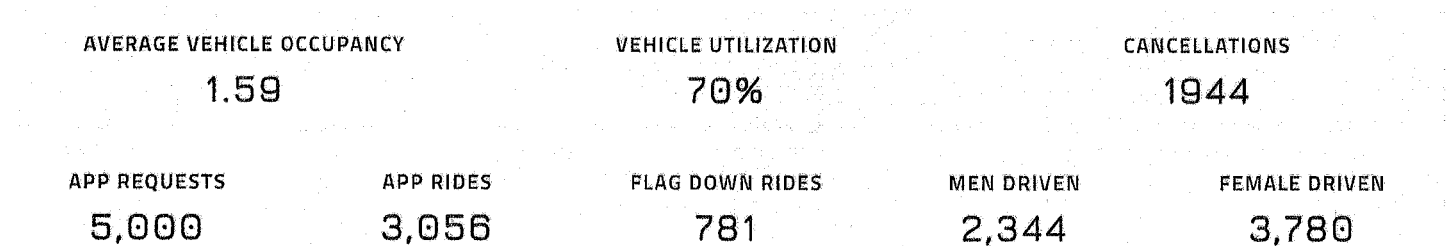




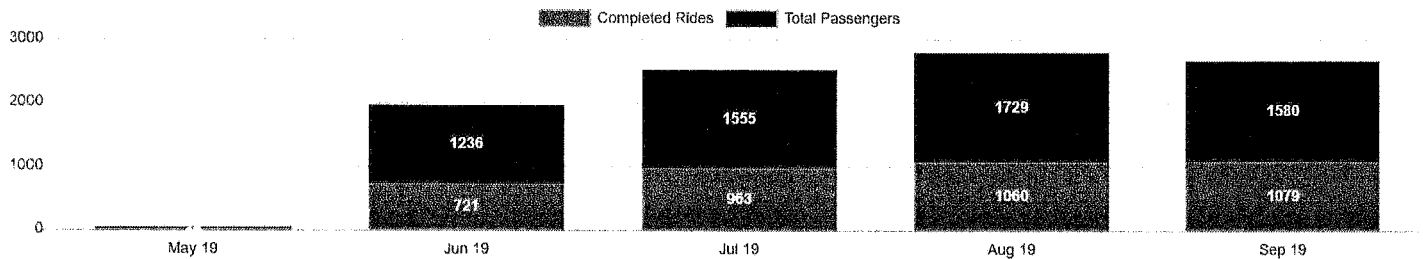
Mid-Beach

05-31-2019 - 09-30-2019

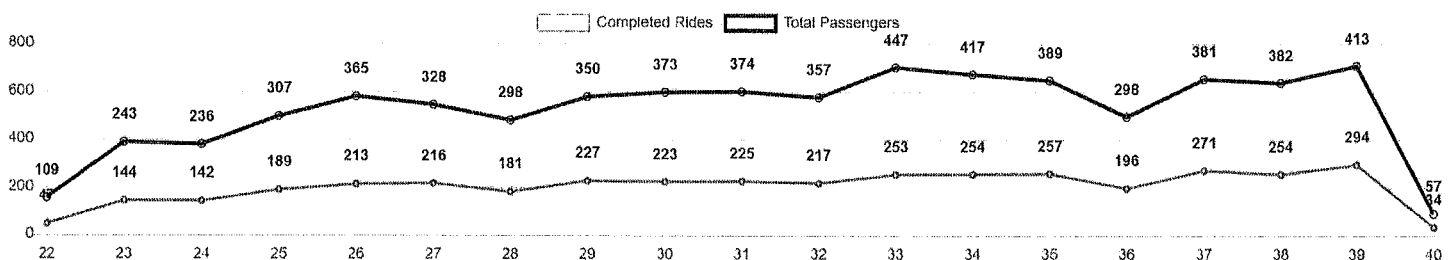
Zone Summary



PASSENGERS AND RIDES BY MONTH (YTD)

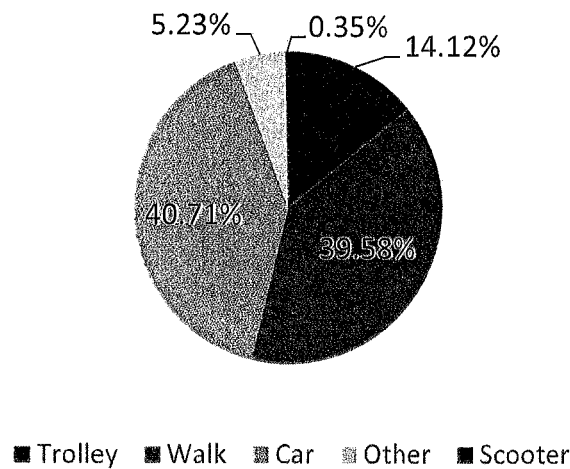


PASSENGERS AND RIDES BY WEEK (YTD)

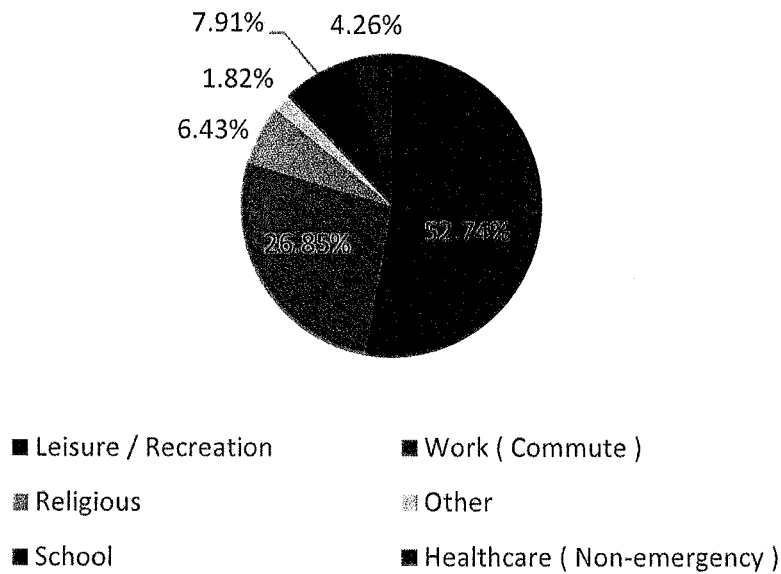


SURVEY RESULTS

How was this trip conducted prior to service implementation?



What is the purpose of this trip?



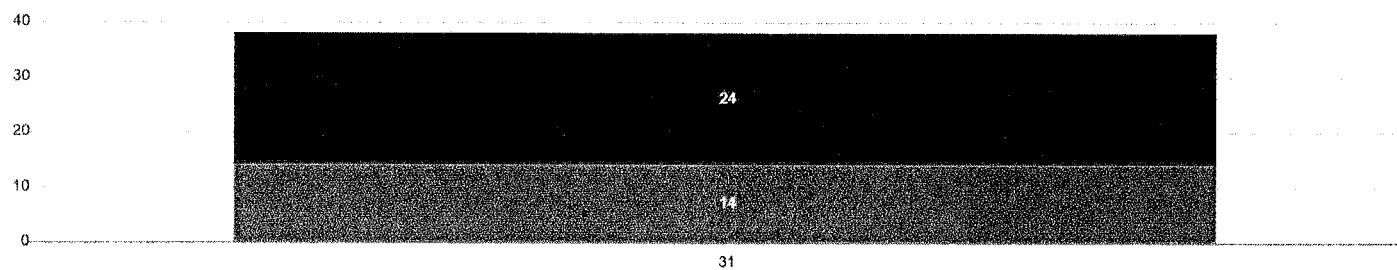
TOP ORIGIN

Publix - Sunset Harbour	184
Publix - North Shore	142
4101 Pine Tree Dr	117
2201 Prairie Ave	114
975 Arthur Godfrey	109

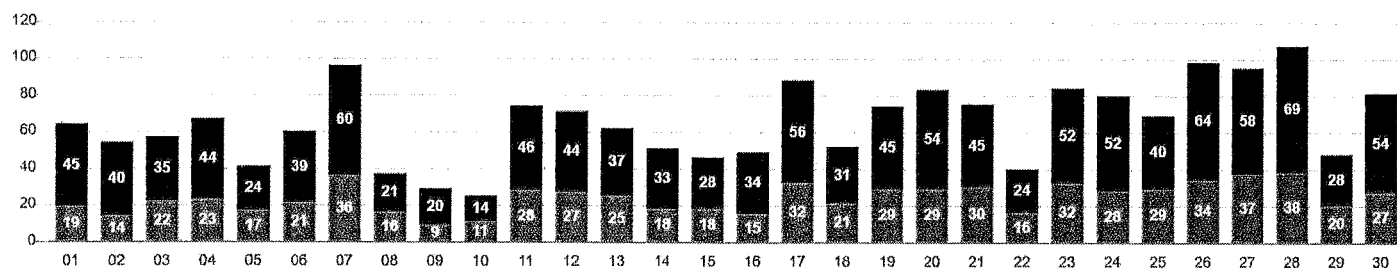
TOP DESTINATIONS

Publix - Sunset Harbour	575
Publix - North Shore	329
Mount Sinai Medical Center	172
4111 Sheridan Ave	67
4101 Pine Tree Dr	50

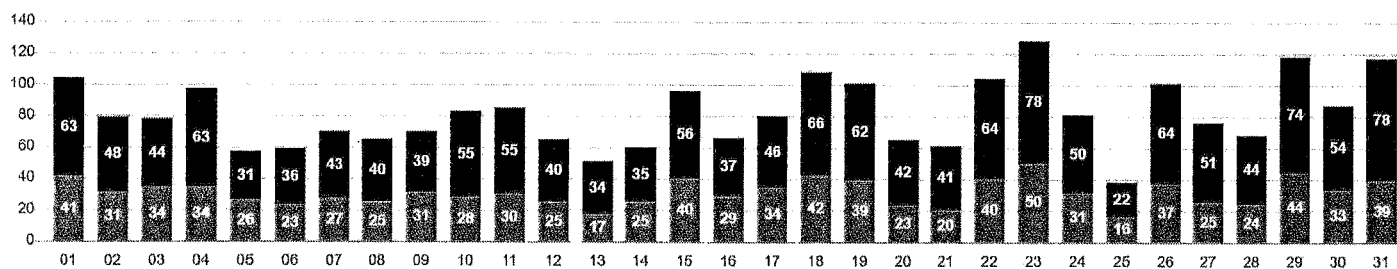
PASSENGERS AND RIDES - MAY



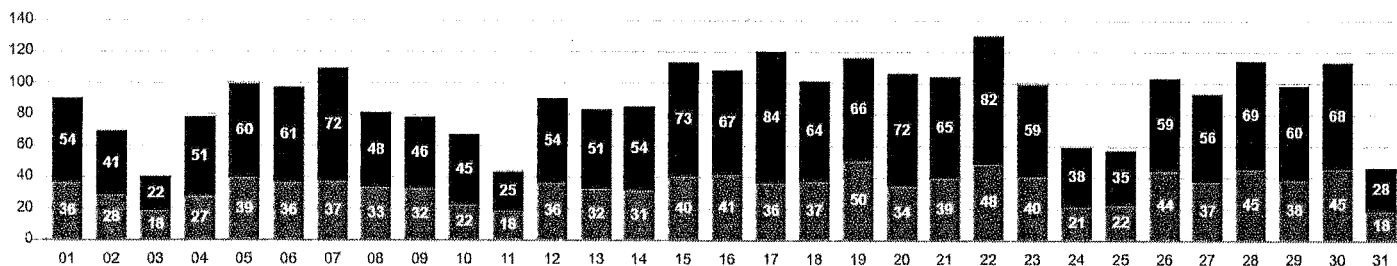
PASSENGERS AND RIDES - JUNE



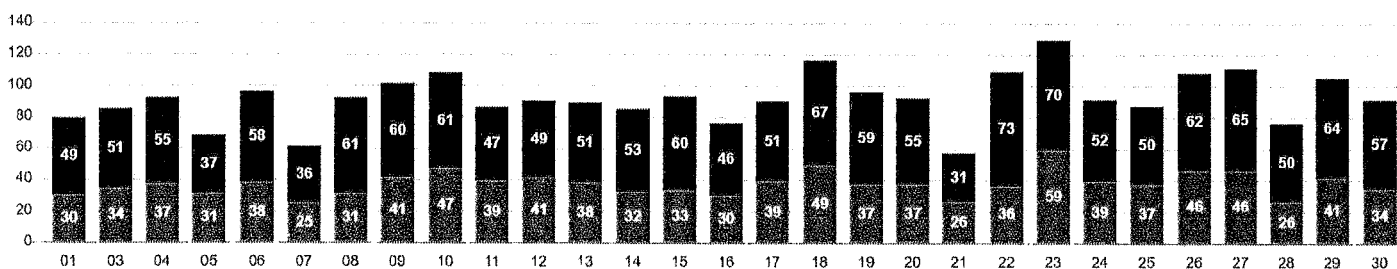
PASSENGERS AND RIDES - JULY



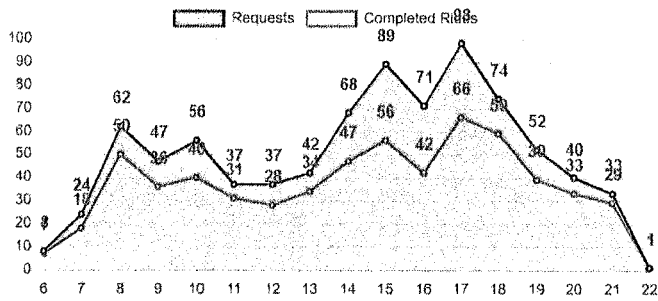
PASSENGERS AND RIDES - AUGUST



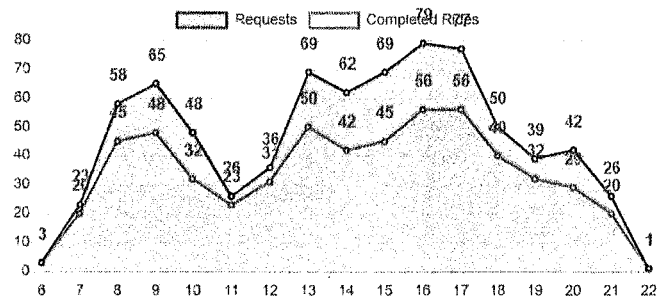
PASSENGERS AND RIDES - SEPTEMBER



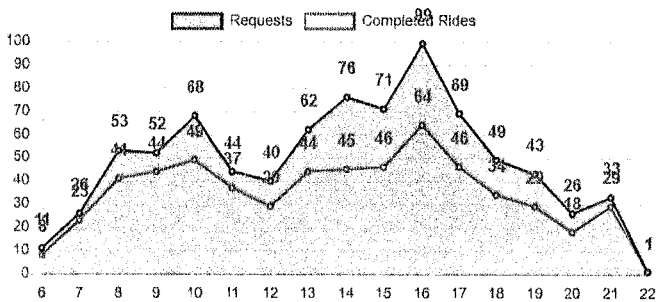
RIDE REQUEST MONDAY



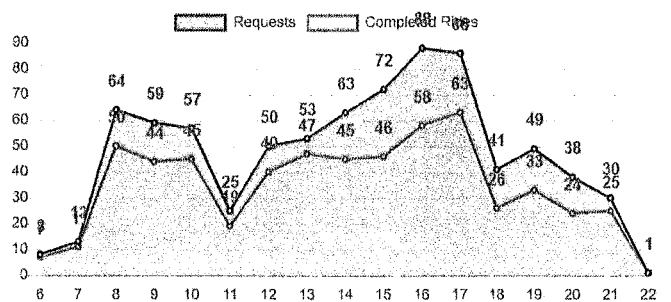
RIDE REQUEST TUESDAY



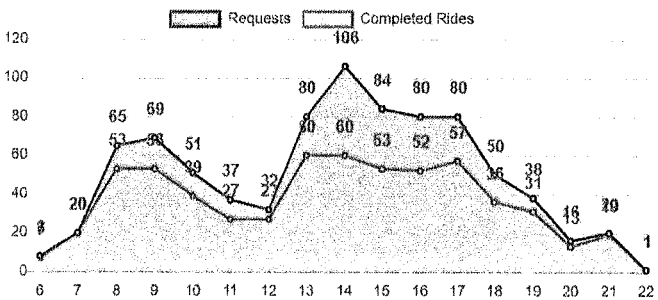
RIDE REQUEST WEDNESDAY



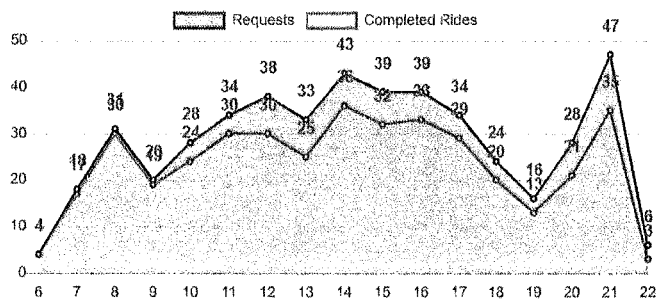
RIDE REQUEST THURSDAY



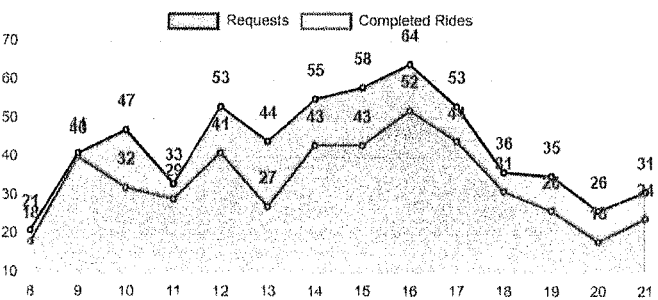
RIDE REQUEST FRIDAY



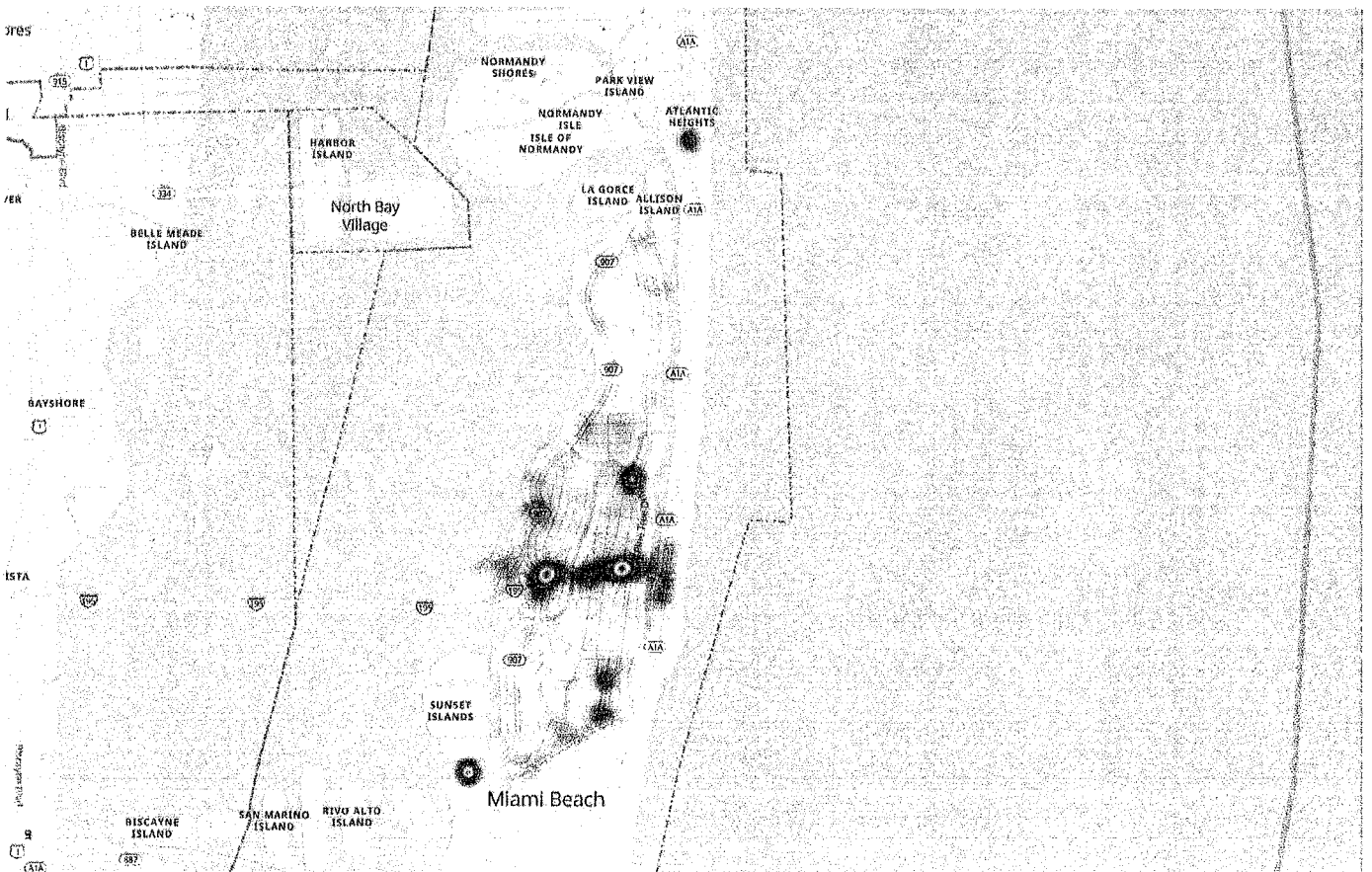
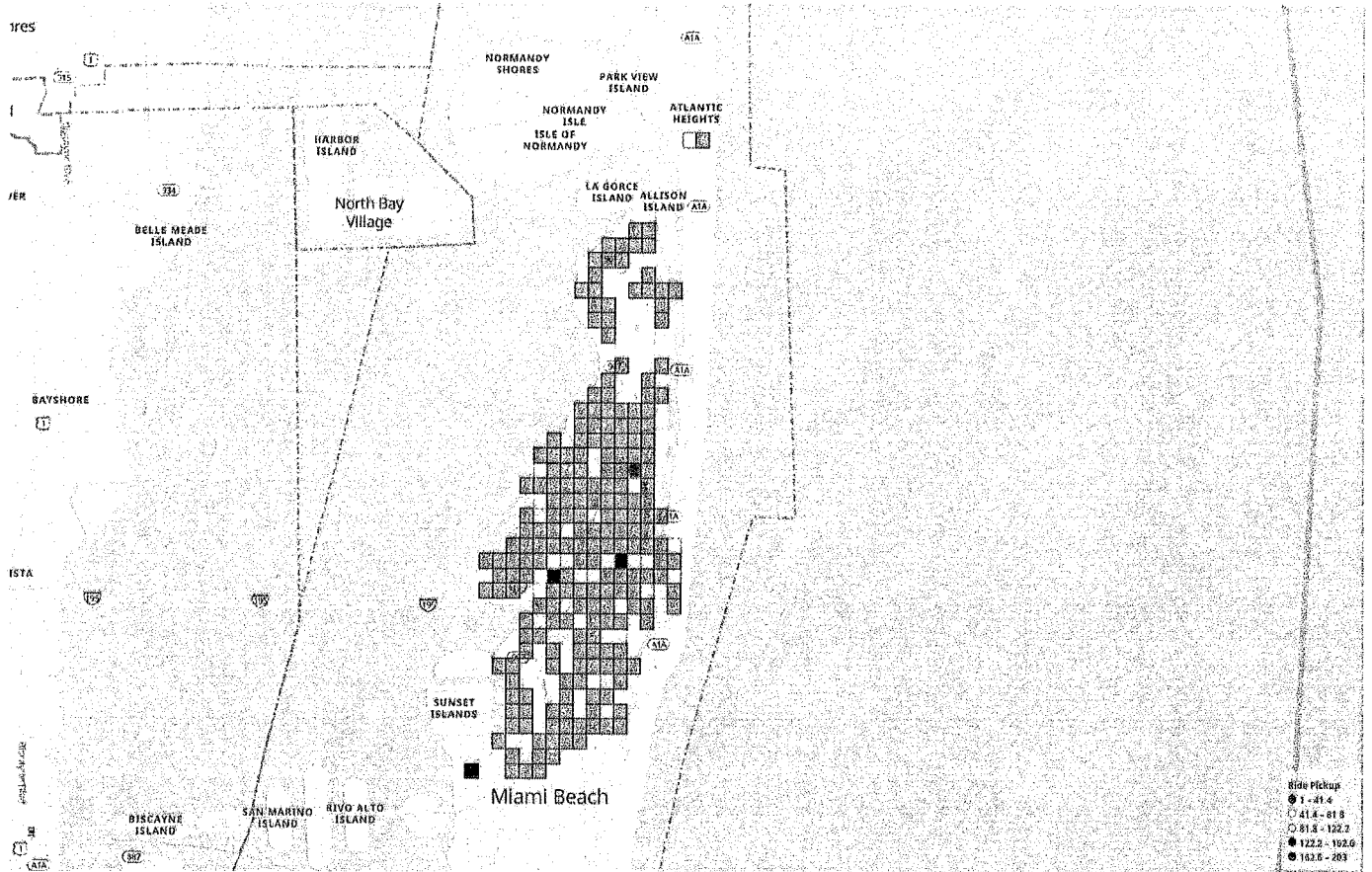
RIDE REQUEST SATURDAY



RIDE REQUEST SUNDAY



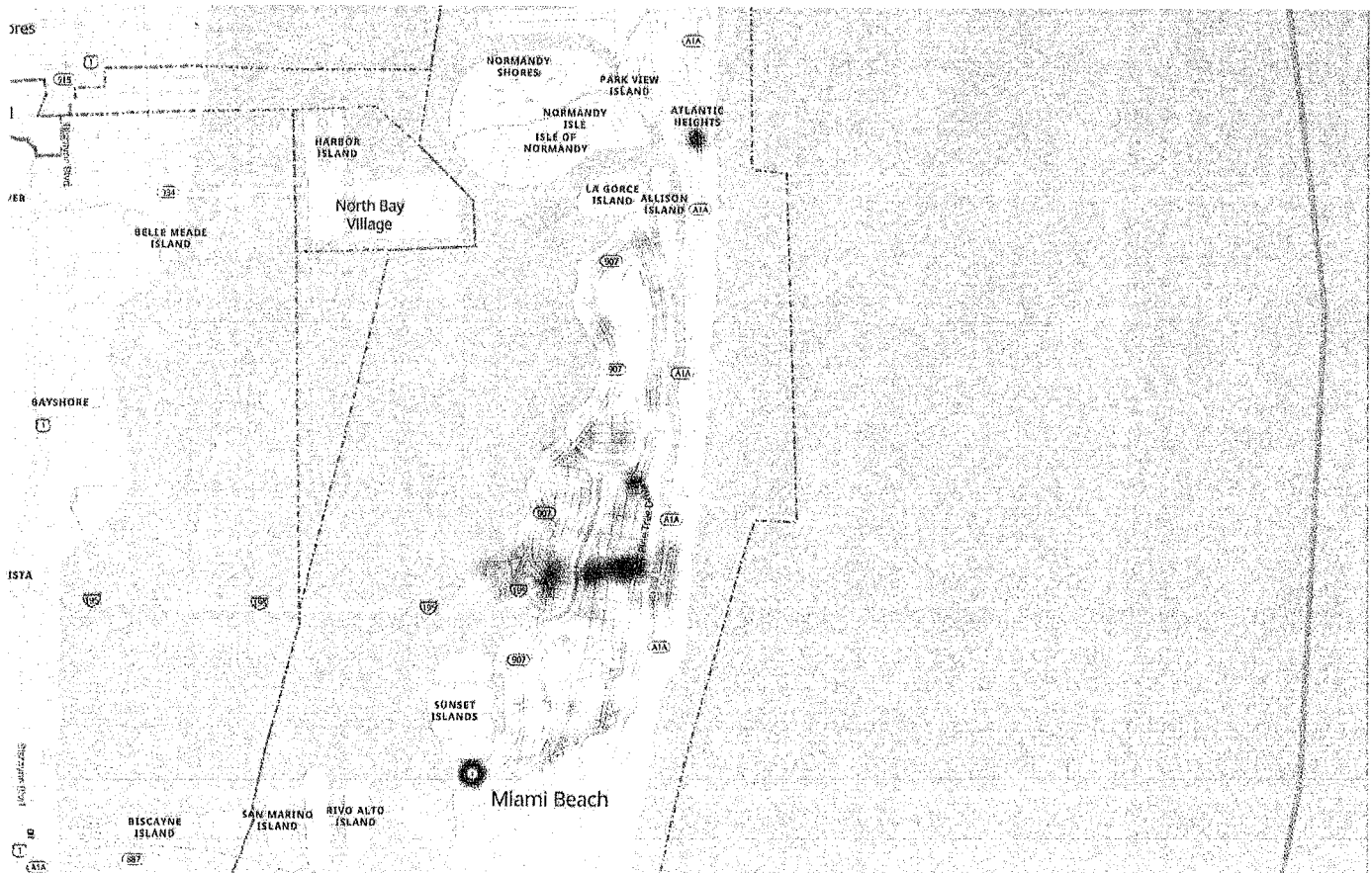
RIDES REQUEST PICKUP



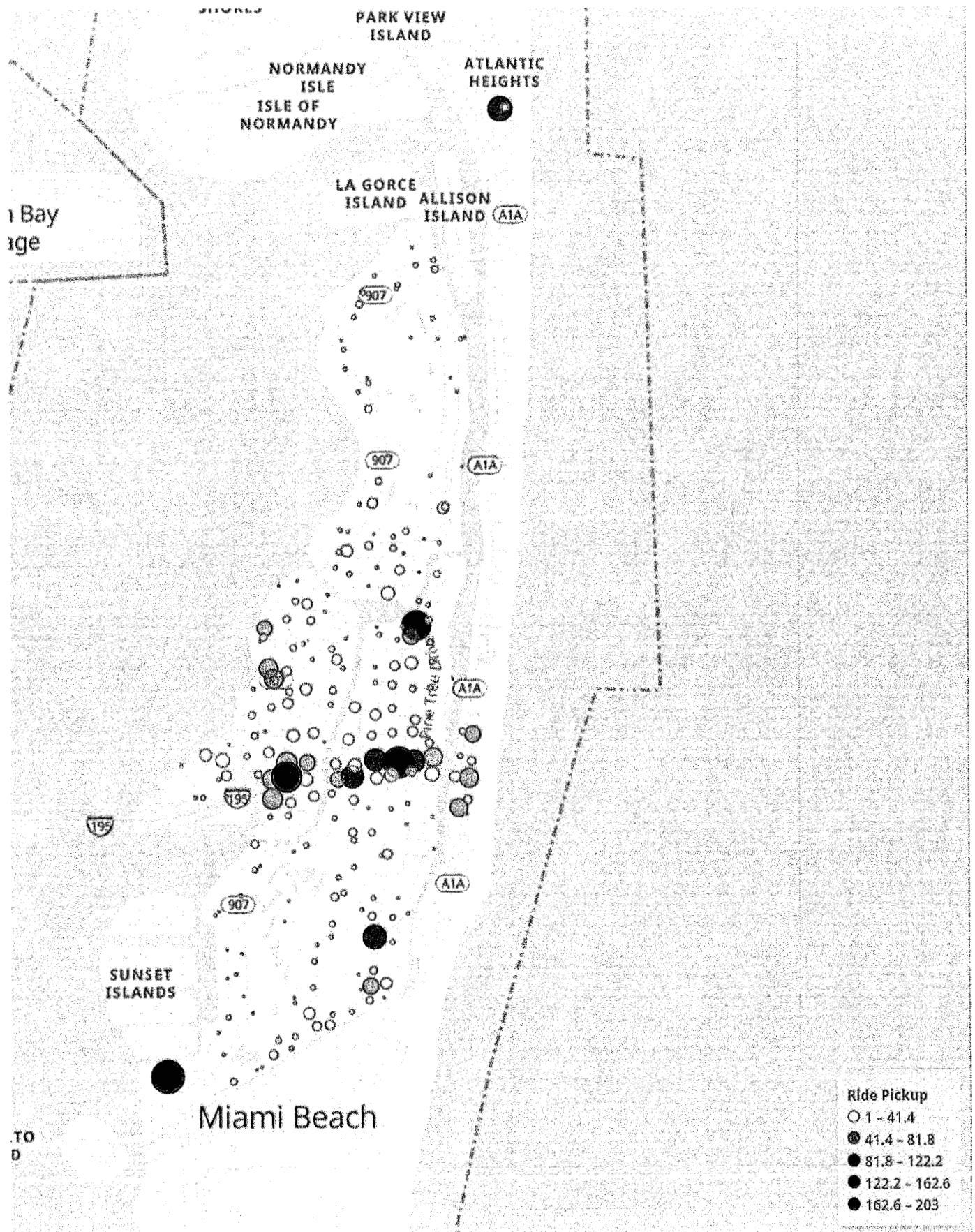
Map of Miami Beach and surrounding areas showing ride pickup locations. The map includes labels for various islands and neighborhoods: Belle Meade Island, Harbor Island, North Bay Village, Sunset Islands, Miami Beach, San Marino Island, Rivo Alto Island, Biscayne Island, Bayshore, ISTA, Normandy Shores, Park View Island, Normandy Isle, Isle of Normandy, La Gorce Island, Allison Island, Atlantic Heights, and Sunset Islands. A grid of ride pickup locations is shown in the central area, with a legend indicating the ride pickup area and the corresponding ride number range.

Ride Pickup

- 1 - 74.5
- 74.6 - 148.2
- 148.2 - 221.8
- 221.8 - 295.4
- 295.4 - 369



PICKUP LOCATIONS



DROP OFF LOCATIONS

